

DYNAMIC FIFO FOR SIMULATION

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ABSTRACT

To perform a simulation, a design can be divided into "blocks" described by models. To ensure that data is efficiently transferred from a source model to a destination model, a dynamic first-in first-out (FIFO) can be placed between these models. The initial size of the dynamic FIFO can be set to a relatively small value. To prevent deadlock, the size of the FIFO can be automatically increased in size by increments. In this manner, the memory resources of the FIFO can be tightly controlled. Advantageously, the size of the optimized dynamic FIFO can be used as the desired size of the FIFO implemented in silicon, thereby also ensuring efficient use of silicon resources.